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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kemal Guler

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7590

11/06/2006

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EXAMINER

DASS, HARISH T

ART UNIT

PAPER NUMBER

3693

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/902,880

Applicant(s)

GULER ET AL.

Examiner

Harish T. Dass

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,9-15 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-15 and 17-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Claims 8, 16, and 24 are canceled.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-15, 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausubel (US 6,021,398) in view of Rackson et al (hereinafter Rackson – US 6,415,270), Luke et al (hereinafter Luke – US 6,131,087) and Admitted Disclosed Prior Art (ADPA).

Re. Claims 1, 9 and 17, Ausubel discloses computer implemented system and method, selecting characteristics of said auction to be conducted [Ausubel see entire document particularly, Abstract; Figures 1-5; C1 L15-L36; C1 L60 to C2 L31], estimating a structure of said market and predicting a first outcome of said market [C4 L3 to C5 L2; C7 L12-L18; C7 L37-L50], and evaluating said first outcome of said market [C2 L10-L17, C2 L56-L61]; and a bus, a memory interconnected with said Bus, and a processor interconnected with said bus [C6 L15-L30 – auctioneer's computers systems includes bus] and readable medium [C6 L15-L30 – auctioneer's computers systems includes hard drive to store operating system, executables, database engine and data], and said estimating expressing unobservable variables in terms of observable bids, wherein said

unobservable variables are expressed in terms of observable bids by inverting said bid model [C14 L15 to C16 L66].

Ausubel does not explicitly disclose selecting a relevant bidding model and predicting a bidding behavior, and Selecting a best preference policy from a plurality of candidate preference policies for treating different groups of bidders differently, wherein said best preference policy comprises the candidate preference policy within a plurality having the highest ranking, and outputting said best preference policy.

However, Luke discloses Selecting an optimal (preferred or a best) preference policy (perfect match bargaining) from a plurality (list) of candidate preference policies, wherein said optimal (preferred or best) preference policy comprises the candidate preference policy within a plurality having the highest ranking, and outputting said best preference policy (display in the preferred fashion) [Figures 1a, 2, 2C-2D; C3 L40-42; C4 L1-L3, L29-33; C6 L65 to C7 L45; C9 L1-L8, L18, L39-L48] to facilitate transaction between participants based on multiple dimension and preferred point.

ADPA discloses treating different groups of bidders differently (see specification, Related Art page 1-2 specifically see page 1 "the United State government offers a 6% price preference for domestically known a "Buy American" ...nearly half the sale price." and page 2 line 13 "Similarly, in many business-to-consumer situation, a seller may wish to treat some segment of customers ... differently from others") to treated some customer preferentially than others for repeated business. It would be obvious to combine disclosures of Ausubel, Luke and ADPA to provide transaction based on multiple dimension, preferential treatment and preferred point (best preference policy).

Ausubel and Luke failed to teach discloses selecting a relevant bidding model and predicting a bidding behavior. However, Rackson discloses determining the optimum selling or bidding parameters, and selecting a relevant bidding model and predicting a bidding behavior [see entire document particularly, Abstract; Figures 12-14; C2 L45 to C3 L32; C24 L5-L55] to select optimal bid to expect bidding range and determine adjusted bid. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Ausubel, Luke and ADPA and include selecting a relevant bidding model and predicting a bidding behavior, as disclosed by Rackson, and select a best preference policy (perfect match bargaining) to optimize the bidding process, as disclosed by Luke, to facilitate a multiple dimension and preferred transaction between participants based predictable bidding behavior.

Re. Claim 2, Ausubel discloses receiving a first user input, wherein said first user input comprises information identifying an item to be auctioned [C6 L50-L63; C36 L10-L13], accessing a database [C2 L53-L55; C6 L30-L37], retrieving from said database historical bids data [C3 L25-L32; C6 L38-L48], retrieving from said database auction characteristics data, wherein said auction characteristics comprise information relating to historical auctions of similar items [C4 L3-L10; C7 L37-L50], outputting said bids data [C35 L55-L67; C37 L40 to C40 L60], and outputting said auction characteristics data [C35 L55-L67].

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Re. Claim 3, Ausubel discloses receiving said auction characteristics data [C1 L61 to C2 L4; C2 L39-L52; C6 L50-L63; C36 L10-L13], and accessing a database [C2 L53-L55; C6 L30-L37]. Neither Ausubel nor Luke explicitly discloses retrieving from said database a relevant bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data and outputting said relevant bidding model. However, Rackson discloses these steps [Figures 12-14; C2 L45 to C3 L32; C24 L5-L55] to select optimal bid to expect bidding range and determine adjusted bid. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Ausubel, Luke and ADPA and include retrieving from said database a relevant bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data and outputting said relevant bidding model, as disclosed by Rackson, to optimize the bidding process.

Re. Claim 4, Ausubel discloses receiving said bids data [C1 L61 to C2 L4; C2 L39-L52; C6 L50-L63; C36 L10-L13], transforming said bids data to a sample of inverted bids, wherein said bids data are transformed by inverting said bid model, estimating an estimated latent structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said estimated structure [C14 L15 to C16 L66]. Ausubel does not explicitly disclose receiving said relevant bidding model and outputting said estimated structure. However, Rackson discloses these steps [Figures 12-14; C2 L45 to C3 L32; C24 L5-L55] to allow bidder to point out

the best strategy to be applied. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to Incorporate the function of receiving said relevant bidding model and outputting said estimated structure, as disclosed by Rackson, into the combination of Ausubel, Luke and ADPA in order to optimize the bidding process.

Re. Claim 5, Ausubel discloses receiving said estimated structure [C14 L15 to C16 L66]. Ausubel does not explicitly disclose receiving said relevant bidding model, substituting said estimated structure for said unknown structure, and outputting a prediction of bidding behavior. However, Rackson discloses selecting a relevant bidding model and predicting a bidding behavior [see entire document particularly, Abstract; Figures 12-14; C2 L45 to C3 L32; C24 L5-L55] to select optimal bid to expect bidding range and determine adjusted bid. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Ausubel, Luke and ADPA and include selecting a relevant bidding model and predicting a bidding behavior, as disclosed by Rackson, to optimize the bidding process.

Re. Claim 6, Ausubel discloses receiving a second user input, wherein said second user input comprises: an evaluation criterion and outputting said value [C1 L60 to C2 L20; C35 L55-L67; C37 L40 to C40 L60]; Neither Ausubel nor Luke explicitly discloses a candidate preference policy, a constraint, receiving said estimated structure, receiving said bidding behavior prediction for said candidate preference policy, wherein said

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bidding behavior prediction further comprises a prediction under said constraint, and obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate preference policy, and said constraint, said value comprising said first predicted outcome. However, Rackson discloses these steps [Figures 12-14; C2 L45 to C3 L32; C12 L50-L63; C23 L55 to C24 L55] to select optimal bid to expect bidding range and determine adjusted bid. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Ausubel, Luke and ADPA and include candidate preference policy, a constraint, receiving said estimated structure, receiving said bidding behavior prediction for said candidate preference policy, wherein said bidding behavior prediction further comprises a prediction under said constraint, and obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate preference policy, and said constraint, said value comprising said first predicted outcome, as disclosed by Rackson, to optimize the bidding process.

Re. Claim 7, Ausubel discloses receiving a third user input [Figure 1]. Neither Ausubel nor Luke explicitly discloses wherein said third user input comprises a plurality of candidate preference policies; receiving a predicted outcome for each said candidate preference policy; calculating descriptive statistics for each said candidate preference policy, wherein said descriptive statistics comprise a mean and a variance; ranking each said candidate preference policy with respect to said calculated mean and generating



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corresponding rankings for said plurality and outputting said descriptive statistics and said rankings. Rackson discloses these steps [C21 L50-L63; Figures 12-14; C2 L45 to C3 L32; C21 L25 to C22 L48; C24 L5-L55] to coordinate a bidding strategy for an item or items across remote auction services in order to achieve an optimal result. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Ausubel, Luke and ADPA and include above functions, as disclosed by Rackson, to coordinate a bidding strategy for optimal bid which is highest for the seller and lowest for the bidder.

Re. Claim 10, claim 10 is rejected with same rational as claim 2.

Re. Claim 11, claim 11 is rejected with same rational as claim 3.

Re. Claim 12, claim 12 is rejected with same rational as claim 4.

Re. Claim 13, claim 13 is rejected with same rational as claim 5.

Re. Claim 14, claim 14 is rejected with same rational as claim 6.

Re. Claim 15, claim 15 is rejected with same rational as claim 7.

Re. Claim 18, claim 18 is rejected with same rational as claim 2.

Re. Claim 19, claim 19 is rejected with same rational as claim 3.

Re. Claim 20, claim 20 is rejected with same rational as claim 4.

Re. Claim 21, claim 21 is rejected with same rational as claim 5.

Re. Claim 22, claim 22 is rejected with same rational as claim 6.

Re. Claim 23, claim 23 is rejected with same rational as claim 7.

### ***Response to Arguments***

Applicant's arguments with respect to amended claims have been considered but are moot in view of the new ground of rejection necessitated by applicant's amendment. No new prior art is include in this rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR ' 1.111 (c) to consider the references fully when responding to this action.

Bajari et al. "Auction Models When Bidders Make Small Mistakes: Consequences for Theory and Estimation, August 15, 2001. [Note: This paper is based on Vuong (1995, 2000), Bajari (1997), see Introduction, pages 13, 16, etc.] discloses estimation with a large number of bidders (learning private information from observed data) and estimation procedure.

Hendricks et al. "A Survey of Recent empirical work concerning auction", Canadian Journal of Economics, Vol. 28, No. 2 (May 1995), pp. 403-426; discloses applying a theoretical model for determination of whether the observed behavior of agents is broadly consistent with predictions of the model, and applying structural estimation model to determine an optimal mechanism.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T. Dass whose telephone number is 571-272-6793. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harish T Dass  
Examiner  
Art Unit 3628

10/27/2006

  
ELLA COLBERT  
PRIMARY EXAMINER